SEQUENCE LISTING

<110> MedImmune Vaccines, Inc.
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Lu, Bin
Cheng, Xing
Zhou, Helen

<120> Functional Mutations in Respiratory Syncytial Virus

<130> 7682-132-999

<140> US 10/672,302
<141> 2003-09-26

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<170> PatentIn version 3.1

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Met Ile Glu Lys
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Val Ala Met Ser Lys Leu Leu Thr Glu Leu Asn Ser Asp Asp Ile Lys
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Lys Leu Arg Asp Asn Glu Glu Leu Asn Ser Pro Lys Ile Arg Val Tyr
115 120 125
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130 135 140
Thr Ile His Leu Leu Lys Arg Leu Pro Ala Asp Val Leu Lys Lys Thr
145 150 155 160
Ile Lys Asn Thr Leu Asp Ile His Lys Ser Ile Thr Ile Asn Asn Pro
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Leu Asp Thr Asn Thr Asp Ala Met Ser Asp Val Ser Gly Phe Asp Ala
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Pro Gln Arg Thr Ala Glu Tyr Ala Leu Gly Thr Ile Gly Val Leu Lys
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Ser Tyr Leu Glu Lys Thr Asn Asn Ile Thr Lys Ser Ile Ala Cys Gly
85 90 95
Ser Leu Ile Thr Val Leu Gln Asn Leu Asp Val Gly Leu Val Ile Gln
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Ala Arg Asp Ser Asn Thr Glu Asp Thr Asn Tyr Leu Arg Ser Cys Asn
115 120 125
Thr Ile Leu Ser Tyr Ile Asp Lys Ile His Lys Lys Arg Gln Ile Ile
130 135 140
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20 25

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Gly Arg Asn Cys Lys Tyr Ser His Lys Tyr Trp Glu Trp
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Gly Arg Arg Cys Lys Tyr Ser His Lys Tyr Trp Glu Trp
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Gly Arg Asn Cys Lys Tyr Ser His Lys Tyr Trp Glu Trp
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Gly Arg Arg Cys Lys Tyr Ser His Lys Tyr Trp Glu Trp
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Gly Arg Asn Cys Lys Tyr Ser His Lys Tyr Trp Glu Trp
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Leu Leu Glu Gly Asn Asp Ser Asp Asn Asp Leu Ser Leu Glu Phe
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<400> 60
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Ile Glu Thr Phe Asp Asn Asn Glu Glu Glu Ser Ser Tyr Ser Asp Glu
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<210> 63
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<400> 76
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<400> 77
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1 5 10 15

<210> 78
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<400> 78
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1 5 10 15

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<400> 79
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<210> 80
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<213> Human respiratory syncytial virus strain A2

<400> 80
Ile Gly Leu Arg Glu Glu
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<223> example conservatively substituted variation of RSV A2 P residues 171-176

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Val Gly Ile Lys Asp Asp
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Ile Gly Val Lys Asp Glu
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<210> 83
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<213> Human respiratory syncytial virus strain A2

<400> 83
Met Glu Lys Phe Ala Pro Glu Phe His Gly Glu Asp Ala Asn Asn Arg
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20 25 30
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35 40 45
Glu Val Thr Lys Glu Ser Pro Ile Thr Ser Asn Ser Thr Ile Ile Asn
50 55 60
Pro Thr Asn Glu Thr Asp Asp Thr Ala Gly Asn Lys Pro Asn Tyr Gln
65 70 75 80
Arg Lys Pro Leu Val Ser Phe Lys Glu Asp Pro Thr Pro Ser Asp Asn
85 90 95
Pro Phe Ser Lys Leu Tyr Lys Glu Thr Ile Glu Thr Phe Asp Asn Asn
100 105 110
Glu Glu Glu Ser Ser Tyr Ser Tyr Glu Glu Ile Asn Asp Gln Thr Asn
115 120 125
Asp Asn Ile Thr Ala Arg Leu Asp Arg Ile Asp Glu Lys Leu Ser Glu
130 135 140
Ile Leu Gly Met Leu His Thr Leu Val Val Ala Ser Ala Gly Pro Thr
145 150 155 160

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Ser Ala Arg Asp Gly Ile Arg Asp Ala Met Ile Gly Leu Arg Glu Glu
                165                 170                 175
Met Ile Glu Lys Ile Arg Thr Glu Ala Leu Met Thr Asn Asp Arg Leu
            180                 185                 190
Glu Ala Met Ala Arg Leu Arg Asn Glu Glu Ser Glu Lys Met Ala Lys
        195                 200                 205
Asp Thr Ser Asp Glu Val Ser Leu Asn Pro Thr Ser Glu Lys Leu Asn
    210                 215                 220
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Phe
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<210> 84
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<213> Human respiratory syncytial virus strain A2

<400> 84

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Ile Thr Ser Ile Leu Ile Thr Ser Arg Cys Arg Val Thr Met Tyr Asn
            20                  25                  30
Gln Lys Asn Thr Leu Cys Leu Asn Gln Asn Asn Pro Asn Asn His Met
        35                  40                  45
Tyr Ser Pro Asn Gln Thr Phe Asn Glu Ile His Trp Thr Ser Gln Glu
    50                  55                  60
Leu Ile Asp Thr Ile Gln Asn Phe Leu Gln His Leu Gly Ile Ile Glu
65                  70                  75                  80
Asp Ile Tyr Thr Ile Tyr Ile Leu Val Ser
                85                  90
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<213> P protein phosphorylation mutant 1

<400> 85

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 1               5
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<400> 86

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Asp Asp Asp Ser Ser
 1               5
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<400> 87

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 1               5
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<211> 5
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1 5

<210> 89
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Leu Arg Leu Ala Ala
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<210> 90
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<213> P protein phosphorylation mutant 6

<400> 90
Leu Arg Leu Asp Asp
1 5

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<212> DNA
<213> artificial

<220>
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<400> 92
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